or a pharmaceutically acceptable salt thereof;

wherein:

W, together with the carbon atoms to which it is attached, form a

5-membered ring diradical

$$R^3$$
—B—A
 X
 R

or

I

 $(O)_{0-2}$ O

A is $-\tilde{C}$ - or $-\tilde{S}$ -;

B is O or NR⁵; or

A and B are taken together to form -C≡C-;

X is O, S, SO, SO₂, NR⁵, or CH₂;

15

10075075 OE1308

15

20

each Y independently is O or S;

 R^4 , and R^5 independently are hydrogen, C_1 - C_6 alkyl, C_2 - C_6 alkenyl, C_2 - C_6 alkynyl, $(CH_2)_n$ cycloalkyl, $(CH_2)_n$ heterocyclic,

 C_1 - C_6 alkanoyl, $(CH_2)_n$ aryl, or $(CH_2)_n$ heteroaryl;

R² and R³ independently are hydrogen, C₁-C₆ alkyl, C₂-C₆ alkenyl,

C₂-C₀ alkynyl, CN, NO₂, NR⁴R⁵, (CH₂)_n cycloalkyl, (CH₂)_n aryl, or (CH₂)_n heteroaryl;

R² may further be halo;

n is an integer of from 0 to 5; and

R⁴ and R⁵ when taken together with a nitrogen to which they are both attached complete a 3- to 8-membered ring containing carbon atoms and optionally containing O, S, or N, and substituted or unsubstituted;

with the proviso that R^1 and R^3 are not both selected from: hydrogen and C_1 - C_6 alkyl.

2. A compound of Formula XI

XI

or a pharmaceutically salt thereof,

wherein:

W, together with the carbon atoms to which it is attached, form a 5-membered ring diradical

$$X$$
 R^2

each Y independently is O or S;

15

20

25

X is S, O, or NR⁵;

 R^4 , and R^5 independently are hydrogen, C_1 - C_6 alkyl, C_2 - C_6 alkenyl, $(C_1$ - C_6 alkynyl, $(C_1$ - C_6 alkynyl, $(C_1$ - C_6 alkanoyl, $(C_1$ - C_6 alkanoyl, $(C_1$ - C_1 - C_2 - $(C_1$ - C_2 - $(C_1$ - $(C_$

 R^2 is hydrogen, halo, C_1 - C_6 alkyl, C_2 - C_6 alkenyl, C_2 - C_6 alkynyl, CN, NO_2 , NR^4R^5 , $(CH_2)_n$ cycloalkyl, $(CH_2)_n$ aryl, or $(CH_2)_n$ heteroaryl;

 R^3 is hydrogen, halo, C_1 - C_6 alkyl, C_2 - C_6 alkenyl, CN, NO₂, NR⁴R⁵, (CH₂)_q cycloalkyl, (CH₂)_q aryl, or (CH₂)_q heteroaryl;

n is 0, 1, or 2;

q is 2, 3, or 4; and

R⁴ and R⁵ when taken together with a nitrogen to which they are both attached complete a 3- to 8-membered ring containing carbon atoms and optionally containing O, S, or N, and substituted or unsubstituted;

with the proviso that R^1 and R^3 are not both selected from hydrogen and C_1 - C_6 alkyl.

- 3. The compound according to Claim 2, or a pharmaceutically acceptable salt thereof, wherein Y is O, and X is S.
- 4. The compound according to Claim 2, or a pharmaceutically acceptable salt thereof, wherein Y is O, and X is O.
- 5. The compound according to Claim 2, or a pharmaceutically acceptable salt thereof, wherein Y is O, and X is NR⁵, wherein R⁵ is hydrogen, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, (CH₂)_n cycloalkyl, (CH₂)_n heterocyclic, C₁-C₆ alkanoyl, (CH₂)_n aryl, or (CH₂)_n heteroaryl.
 - 6. A compound of Formula II

15

20

II

or a pharmaceutically acceptable salt thereof,

wherein:

 $O (O) \partial_{\sqrt{2}}$

A is -C- or -S-;

B is O or NR⁵; or

A and B are taken together to form -C≡C-;

each Y independently is O or S

 R^1 , R^4 , and R^5 independently are hydrogen, C_1 - C_6 alkyl, C_2 - C_6 alkenyl,

 C_2 - C_6 alkynyl, $(CH_2)_n$ cycldalkyl, $(CH_2)_n$ heterocyclic,

 $C_1\text{-}C_6 \text{ alkanoyl, } (\text{CH}_2)_n \text{ aryl, } o_{\text{\tiny N}}^{\text{\tiny N}}(\text{CH}_2)_n \text{ heteroaryl;}$

 R^2 and R^3 independently are hydrogen, C_1 - C_6 alkyl, C_2 - C_6 alkenyl,

C₂-C₆ alkynyl, CN, NO₂, NR⁴R⁵, $(CH_2)_n$ cycloalkyl, $(CH_2)_n$ aryl, or $(CH_2)_n$ heteroaryl;

R² may further be halo;

n is an integer of from 0 to 5; and

R⁴ and R⁵ when taken together with a nitrogen to which they are both attached complete a 3- to 8-membered ring containing carbon atoms and optionally containing O, S, or N, and substituted or unsubstituted;

with the proviso that R¹ and R³ are not both selected from: hydrogen and C₁-C₆ alkyl.

7. The compound according to Claim 6, or a pharmaceutically acceptable salt thereof, wherein -A-B- is -C≡C-.

15

20

8. The compound according to Claim 6, or a pharmaceutically acceptable salt

C

thereof, wherein A is -C- and B is NR⁵, wherein R⁵ is hydrogen, C_1 - C_6 alkyl, C_2 - C_6 alkenyl, C_2 - C_6 alkynyl, $(CH_2)_n$ cycloalkyl, $(CH_2)_n$ heterocyclic, C_1 - C_6 alkanoyl, $(CH_2)_n$ aryl, or $(CH_2)_n$ heteroaryl.

9. The compound according to Claim 6, or a pharmaceutically acceptable salt

thereof, wherein A is -C- and B is O.

10. A compound of Formula III

$$R^{1}$$
 N
 R^{4}
 R^{2}
 R^{2}
 R^{2}
 R^{2}
 R^{3}

 \mathbf{IH}

or a pharmaceutically acceptable salt thereof,

wherein:

O
$$(O)_{0-2}$$

A is -C- or -S-;

B is O or NR⁵; or

A and B are taken together to form -C≡C-;

R¹, R⁴, and R⁵ independently are hydrogen, C₁-C₆ alkyl C₂-C₆ alkenyl,

 C_2 - C_6 alkynyl, $(CH_2)_n$ cycloalkyl, $(CH_2)_n$ heterocyclic,

 C_1 - C_6 alkanoyl, $(CH_2)_n$ aryl, or $(CH_2)_n$ heteroaryl;

Re and R³ independently are hydrogen, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, CN, NO₂, NR⁴R⁵, (CH₂)_n cycloalkyl, (CH₂)_n aryl, or (CH₂)_n heteroaryl;

and and

10

R² may further be halo;

n is an integer of from 0 to 5; and

R⁴ and R⁵ when taken together with a nitrogen to which they are both attached complete a 3- to 8-membered ring containing carbon atoms and optionally containing O, S, or N, and substituted or unsubstituted;

with the proviso that R^1 and R^3 are not both selected from hydrogen and C_1 - C_6 alkyl.

11. A compound of Formula IV

15

or a pharmaceutically acceptable salt thereof,

wherein:

$$O (O)_{0-2}$$

A is -C- or -S-;

20

B is O or NR⁵; or

A and B are taken together to form -C≡C-;

R¹, R⁴, and R⁵ independently are hydrogen, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, (CH₂)_n cycloalkyl, (CH₂)_n heterocyclic, C₁-C₆ alkanoyl, (CH₂)_n aryl, or (CH₂)_n heteroaryl;

R² and R³ independently are hydrogen, C₁-C₆ alkyl, C₂-C₆ alkenyl, C2-C6 alkynyl, CN, NO2, NR4R5, (CH2)n cycloalkyl, (CH2)n aryl, or (CH₂)_n heteroaryl;

R² may further be halo;

n is an integer of from 0 to 5; and

R⁴ and R⁵ when taken together with a nitrogen to which they are both attached complete a 3- to 8-membered ring containing carbon atoms and optionally containing O, S, or N, and substituted or unsubstituted;

with the proviso that R¹ and R³ are not both selected from hydrogen and C₁-C₆ alkyl.

12. A compound of Formula V

$$R^{1}$$
 N
 R^{4}
 R^{5}
 R^{2}
 R^{3}

15

or a pharmaceutically acceptable salt thereof, wherein:

O
$$(O)_{0-2}$$

A is -C- or -S-;

20

B is O or NR⁵; or

A and B are taken together to form -C≡C-;

 R^1 , R^4 , and R^5 independently are hydrogen, C_1 - C_6 alkyl, C_2 - C_6 alkenyl, C2-C6 alkynyl, (CH2)n cycloalkyl, (CH2)n heterocyclic, C_1 - C_6 alkanoyl, $(CH_2)_n$ aryl, or $(CH_2)_n$ heteroaryl;

13.

20

25

R² and R³ independently are hydrogen, C₁-C₆ alkyl, C₂-C₆ alkenyl, \mathbb{C}_2 -C₆ alkynyl, CN, NO₂, NR⁴R⁵, (CH₂)_n cycloalkyl, (CH₂)_n aryl, or (CH₂)_n heteroaryl; R² may further be halo; n is an integer of from 0 to 5; and R⁴ and R⁵ when taken together with a nitrogen to which they are both attached complete a 3- to 8-membered ring containing carbon atoms and optionally containing O, S, or N, and substituted or unsubstituted; with the proviso that R¹ and R³ are not both selected from hydrogen and C₁-C₆ alkyl. The compound according to Claim 1, selected from: 4-{6-[3-(4-Methoxy-phenyl) prop-1-ynyl]-1-methyl-2,4-dioxo-1,4dihydro-2*H*-thieno[2,3-*d*]pyrimidine-3-ylmethyl}-benzoic acid; 3-(4-Methanesulfonyl-benzyl)-6\(\) (4-methoxy-phenyl)-prop-1ynyl]-1-methyl-1*H*-thieno[2,3-*d*]pyrimidine-2,4-dione; $4-\{6-[3-(3-Methoxy-phenyl)-prop-1-\chi nyl]-1-methyl-2,4-dioxo-1,4$ dihydro-2H-thieno[2,3-d]pyrimidine-3-ylmeth l}-benzoic acid; 3-(4-Methanesulfonyl-benzyl)-6-[3-(3-methoxy-phenyl)-prop-1ynyl]-1-methyl-1*H*-thieno[2,3-*d*]pyrimidine-2,4-dione; 4-[1-Methyl-2,4-dioxo-6-(3-pyridine-4-yl-prop-1-ynyl)-1,4dihydro-2*H*-thieno[2,3-*d*]pyrimidine-3-ylmethyl]-benzoic acid; 3-(4-Methanesulfonyl-benzyl)-1-6-(3-pyridin-4-) -prop-1-ynyl)-1*H*-thieno[2,3-*d*]pyrimidine-2,4-dione; 4-[1-Methyl-2,4-dioxo-6-(3-pyridine-3-yl-prop-1-ynyl)-1,4dihydro-2H-thieno[2,3-d]pyrimidine-3-ylmethyl]-benzoic acid 3-(4-Methanesulfonyl-benzyl)-1-6-(3-pyridin-3-yl-prop-1-ynyl)-

4-{6-[3-(4-Fluoro-phenyl)-prop-1-ynyl]-1-methyl-2,4-dioxo\1,4-

dihydro-2*H*-thieno[2,3-*d*]pyrimidine-3-ylmethyl}-benzoic acid;

1*H*-thieno[2,3-*d*]pyrimidine-2,4-dione;

30

```
6-[3-(4-Fluoro-phenyl)-prop-1-ynyl]-3-(4-methanesulfonyl-
benzyl)-1-methyl-1H-thieno[2,3-d]pyrimidine-2,4-dione;
       4-{6-[3-(3-Fluoro-phenyl)-prop-1-ynyl]-1-methyl-2,4-dioxo-1,4-
dihydro-2\(\frac{1}{4}\)-thieno[2,3-\(d\)]pyrimidine-3-ylmethyl}-benzoic acid;
       6-[3-(3-Fluoro-phenyl)-prop-1-ynyl]-3-(4-methanesulfonyl-
benzyl)-1-methyl-1H-thieno[2,3-d]pyrimidine-2,4-dione;
       4-{6-[3-(4-Chloro-phenyl)-prop-1-ynyl]-1-methyl-2,4-dioxo-1,4-
dihydro-2H-thieno (2,3-d)pyrimidine-3-ylmethyl}-benzoic acid;
       6-[3-(4-Chloro-phenyl)-prop-1-ynyl]-3-(4-methanesulfonyl-
benzyl)-1-methyl-1H-thieno[2,3-d]pyrimidine-2,4-dione;
       4-{6-[3-(3-Chlord phenyl)-prop-1-ynyl]-1-methyl-2,4-dioxo-1,4-
dihydro-2H-thieno[2,3-d]p rimidine-3-ylmethyl}-benzoic acid;
       6-[3-(3-Chloro-phenyl)-prop-1-ynyl]-3-(4-methanesulfonyl-
benzyl)-1-methyl-1H-thieno[2,3,-d]pyrimidine-2,4-dione;
       4-{6-[3-(4-Bromo-phenyl)-prop-1-ynyl]-1-methyl-2,4-dioxo-1,4-
dihydro-2H-thieno[2,3-d]pyrimidine-3-ylmethyl}-benzoic acid;
       6-[3-(4-Bromo-phenyl)-prop-\(\frac{1}{2}\)-ynyl]-3-(4-methanesulfonyl-
benzyl)-1-methyl-1H-thieno[2,3-d]pyrimidine-2,4-dione;
       4-{6-[3-(3-Bromo-phenyl)-prop-\(\)-ynyl]-1-methyl-2,4-dioxo-1,4-
dihydro-2H-thieno[2,3-d]pyrimidine-3-ylmethyl}-benzoic acid;
       6-[3-(3-Bromo-phenyl)-prop-1-ynyl]\sqrt{3-(4-methanesulfonyl-prop-1-ynyl)}
benzyl)-1-methyl-1H-thieno[2,3-d]pyrimidine\2,4-dione;
       4-{1-Methyl-6-[3-(4-nitro-phenyl)-prop-\(\bar{1}\)-ynyl]-2,4-dioxo-1,4-
dihydro-2H-thieno[2,3-d]pyrimidine-3-ylmethyl}\benzoic acid;
       3-(4-Methanesulfonyl-benzyl)-1-methyl-6-[\$-(4-nitro-phenyl)-
prop-1-ynyl)-1H-thieno[2,3-d]pyrimidine-2,4-dione;
       4-{6-[3-(2-Methoxy-pyridin-4-yl)-prop-1-ynyl] 1-methyl-2,4-
dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidine-3-ylmethyl}-benzoic acid;
       3-(4-Methanesulfonyl-benzyl)-6-[3-(2 methoxy-pyridin-4-yl)-prop-
1-ynyl]-1-methyl-1H-thieno[2,3-d]pyrimidine-2,4-dione;
       4-{1-Methyl-6-[3-(4-methylsulfanyl-phenyl)-prop-1-ynyl]-2,4-
dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidine-3-ylmethyl}-behzoic acid;
```

3-(4-Methanesulfonyl-benzyl)-1-methyl-6-[3-(4-methylsulfanyl
phenyl prop-1-ynyl]-1H-thieno[2,3-d]pyrimidine-2,4-dione;
4-(1-Methyl-6-[3-(3-methylsulfanyl-phenyl)-prop-1-ynyl]-2,4-

dioxo-1,4-dhydro-2H-thieno[2,3-d]pyrimidine-3-ylmethyl}-benzoic acid;

3-(4-Methanesulfonyl-benzyl)-1-methyl-6-[3-(3-methylsulfanylphenyl)-prop-1- $\sqrt{\eta}$ yl]-1*H*-thieno[2,3-*d*]pyrimidine-2,4-dione;

4-[1-Methy] + 2,4-dioxo-6-(3-p-tolyl-prop-1-ynyl)-1,4-dihydro-2Hthieno[2,3-d]pyrimidin-3-ylmethyl]benzoic acid;

3-(4-Methanesultonyl-benzyl)-1-methyl-6-(3-p-tolyl-prop-1-ynyl)-1H-thieno[2,3-d]pyrimidine-2,4-dione;

4-[1-Methyl-2,4-diox o-6-(3-m-tolyl-prop-1-ynyl)-1,4-dihydro-2Hthieno[2,3-d]pyrimidin-3-ylmethyl]benzoic acid;

3-(4-Methanesulfonyl-benzyl)-1-methyl-6-(3-m-tolyl-prop-1-ynyl)-1H-thieno[2,3-d]pyrimidine-2,4-di\ne;

3-Benzyl-6-[3-(4-methoxy-phenyl)-prop-1-ynyl]-1-methyl-1Hthieno[2,3-d]pyrimidine-2,4-dione;

3-Benzyl-6-[3-(3-methoxy-phenyl)-prop-1-ynyl]-1-methyl-1Hthieno[2,3-d]pyrimidine-2,4-dione;

3-Benzyl-1-methyl-6-(3-pyridin-4-yl-prop-1-ynyl)-1H-thieno[2,3d|pyrimidine-2,4-dione;

3-Benzyl-1-methyl-6-(3-pyridin-3-yl-prop\1-ynyl)-1H-thieno[2,3d|pyrimidine-2,4-dione;

3-Benzyl-6-[3-(4-fluoro-phenyl)-prop-1-ynyl]1-methyl-1Hthieno[2,3-d]pyrimidine-2,4-dione;

3-Benzyl-6-[3-(3-fluoro-phenyl)-prop-1-ynyl]-1-methyl-1Hthieno[2,3-d]pyrimidine-2,4-dione;

3-Benzyl-6-[3-(4-chloro-phenyl)-prop-1-ynyl]-1-methyl-1*H*thieno[2,3-d]pyrimidine-2,4-dione;

3-Benzyl-6-[3-(3-chloro-phenyl)-prop-1-ynyl]-1-methylthieno[2,3-d]pyrimidine-2,4-dione;

3-Benzyl-6-[3-(4-bromo-phenyl)-prop-1-ynyl]-1-methyl-1*H*thieno[2,3-d]pyrimidine-2,4-dione;

3-Benzyl-6-[3-(3-bromo-phenyl)-prop-1-ynyl]-1-methyl-1Hthieno[2,3-d]pyrimidine-2,4-dione; 3-Renzyl-6-[3-(2-methoxy-pyridin-4-yl)-prop-1-ynyl]-1-methyl-1H-thieno[2\,3-d]pyrimidine-2,4-dione; 3-Benzyl-1-methyl-6-[3-(4-methylsulfanyl-phenyl)-prop-1-ynyl]-1*H*-thieno[2,3-*d*] pyrimidine-2,4-dione; 3-Benzyl-1-methyl-6-[3-(3-methylsulfanyl-phenyl)-prop-1-ynyl]-1H-thieno[2,3-d]pyrindidine-2,4-dione; 3-Benzyl-1-methyl-6-(3-p-tolyl-prop-1-ynyl)-1H-thieno[2,3-10 d]pyrimidine-2,4-dione; 10075075.UE130E 3-Benzyl-1-methyl- $6\sqrt{3-m}$ -tolyl-prop-1-ynyl)-1*H*-thieno[2,3d]pyrimidine-2,4-dione; 3-(3-Fluoro-benzyl)-6-[3-\4-methoxy-phenyl)-prop-1-ynyl]-1methyl-1*H*-thieno[2,3-*d*]pyrimidine 2,4-dione; 3-(3-Fluoro-benzyl)-6-[3-(3-methoxy-phenyl)-prop-1-ynyl]-1-15 methyl-1*H*-thieno[2,3-*d*]pyrimidine-2,4\dione; 3-(3-Fluoro-benzyl)-1-methyl-6-(3pyridine-4-yl-prop-1-ynyl)-1Hthieno[2,3-d]pyrimidine-2,4-dione; 3-(3-Fluoro-benzyl)-1-methyl-6-(3-pyridine-3-yl-prop-1-ynyl)-1H-20 thieno[2,3-d]pyrimidine-2,4-dione; 3-(3-Fluoro-benzyl)-6-[3-(4-fluoro-phenyl), prop-1-ynyl]-1-methyl-1*H*-thieno[2,3-*d*]pyrimidine-2,4-dione; $3-(3-Fluoro-benzyl)-6-[3-(3-fluoro-phenyl)-pr \\ \Delta p-1-ynyl]-1-methyl-pr \\ \Delta p-1-ynyl]-1-methyl-pr \\ \Delta p-1-ynyl-pr \\ \Delta p-1-yn$ 1H-thieno[2,3-d]pyrimidine-2,4-dione; 6-[3-(4-Chloro-phenyl)-prop-1-ynyl]-3-(3-fluoro-benzyl)-1-25 methyl-1*H*-thieno[2,3-*d*]pyrimidine-2,4-dione; 6-[3-(3-Chloro-phenyl)-prop-1-ynyl]-3-(3-fluoro-benzyl)-1methyl-1*H*-thieno[2,3-*d*]pyrimidine-2,4-dione; б-[3-(4-Вготно-phenyl)-prop-1-ynyl]-3-(3-fluoro-benzyl)-30 methyl-1*H*-thieno[2,3-*d*]pyrimidine-2,4-dione; 6-[3-(3-Bromo-phenyl)-prop-1-ynyl]-3-(3-fluoro-benzyl)-1-

methyl-1*H*-thieno[2,3-*d*]pyrimidine-2,4-dione;

3-(3-Fluoro-benzyl)-6-[3-(2-methoxy-pyridin-4-yl)-prop-1-ynyl]-1-

meth 1H-thieno[2,3-d]pyrimidine-2,4-dione; (3-Fluoro-benzyl)-1-methyl-6-[3-(4-methylsulfanyl-phenyl)prop-1-ynyl]-1*H*-thieno[2,3-*d*]pyrimidine-2,4-dione; 3-(3-Pluoro-benzyl)-1-methyl-6-[3-(3-methylsulfanyl-phenyl)prop-1-ynyl]-1*H*thieno[2,3-*d*]pyrimidine-2,4-dione; 3-(3-Fluord-benzyl)-1-methyl-6-(3-p-tolyl-prop-1-ynyl)-1Hthieno[2,3-d]pyrimidine-2,4-dione; and $3-(3-\text{Fluoro-ben}_{xyl})-1-\text{methyl}-6-(3-m-\text{tolyl-prop}-1-\text{ynyl})-1H$ thieno[2,3-d]pyrimidine-2,4-dione. 10 The compound according to Claim 1, selected from: 14. 3-(3-Methoxycarbonyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidine 6-carboxylic acid benzyl ester; 3-(3-Methoxycarbonyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-15 tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-Benzofuran-5-ylmethyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 1-Methyl-3-(4-methyl-benzyl)-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 20 3-(4-Acetylamino-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl exter; 1-Methyl-2,4-dioxo-3-(4-vinyl-benzyl)-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester 1-Methyl-2,4-dioxo-3-(4-sulfamoyl-benzyl)-1,2,3,4-tetrahydro-25 thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-(4-Bromo-benzyl)-2,4-dioxo-1,2,3,4-tetrahydro-thiano[2,3dpyrimidine-6-carboxylic acid pyridin-4-ylmethyl ester; 1-Methyl-2,4-dioxo-3-phenethyl-1,2,3,4-tetrahydro-thien [2,3dpyrimidine-6-carboxylic acid benzyl ester; 30 1-Methyl-2,4-dioxo-3-[4-(2H-tetrazol-5-yl)-benzyl]-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

Contract of the second

10

15

20

25

30

3-(4-Fluoro-benzyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid pyridin-4-ylmethyl ester;

3-(4-tert-Butyoxycarbonyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(4-*tert* Butyoxycarbonyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid;

4-[6-(4-Fluoro-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid;

4-[6-(4-Dimethylamino-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid, compound with trifluoro-acetic acid:

4-[6-(2-Ethoxy-benzylcabamoyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidina-3-ylmethyl]-benzoic acid;

1-Methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid;

1-Methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-[4-(1H-tetrazol 5-yl)-benzyl]-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxyllc acid 3-methoxy-benzylamide;

1-Methyl-3-[4-(morpholine-4-sulfonyl)-benzyl]-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-3-[4-(morpholine-4-carbonyl)-benzyl]-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

3-But-2-ynyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thjeno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Mcthyl-2,4-dioxo-3 [3 (1*H* tetrazol-5-yl)-benzyl]-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

3-(4-Cyano-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

15

20

{4-[6-(3-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-phenyl}-acetic acid;

3-[2x(2,4-Dichloro-benzenesulfonyl)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrah dro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxybenzylamide;

3-(4-Methanesulfonyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4tetrahydro-thieno[2,3\d]pyrimidine-6-carboxylic acid 3-methoxybenzylamide;

1-Methyl-2,4-diox\d-3-(4-sulfamoyl-benzyl)-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid (2 methoxy-pyridin-4-ylmethyl)-amide;

1-Methyl-3-(4-methylsulfamoyl-benzyl)-2,4-dioxo-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidine-6-darboxylic acid 3-methoxybenzylamide;

3-(4-Isopropylsulfamoyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidine-6-carbox lic acid 3-methoxybenzylamide;

1-Methyl-2,4-dioxo-3-[4-(pyrrolidine-1-sulfonyl)-benzyl]-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxybenzylamide; and

1-Methyl-3-[4-(4-methyl-piperidine-1-sulfonyl)-genzyl]-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic adid 3-methoxybenzylamide.

25

The compound according to Claim 1, selected from: 15.

> 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3 d]pyrimidine-6-carboxylic acid benzofuran-2-ylmethyl ester;

3-(4-Bromo-benzyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid pyridin-4-ylmethyl ester;

3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6carboxylic acid 4-methoxy-benzyl ester;

30

ester;

-231-
4-{1-Methyl-2,4-dioxo-6-[(pyridin-4-ylmethyl)-carbamoyl]-1,4-
dhydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl}-benzoic acid, compound
with trifluoro-acetic acid;
with trifluoro-acetic acid; 4-[6-(4-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid;
dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid;
4-[6 (3,4-Dimethoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-
\

4-[6-(3,4-Dimethoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid;

dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid *tert*-butyl

4-[6-(4-Bromo-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidia-3-ylmethyl]-benzoic acid;

4-[6-(4-Bromo-benz)carbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid *tert*-butyl ester;

4-[6-(3,5-Bis-trifluoromethyl-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid;

4-[6-(4-Chloro-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl benzoic acid;

4-[1-Methyl-2,4-dioxo-6-(4-sulfamoyl-benzylcarbamoyl)-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid;

3-(4-Fluoro-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-(4-Iodo-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

3-(4-Dimethylsulfamoyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-(3-Methoxy-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-(4-Cyano-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-(4-Acetylamino-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

5-[6-(3-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-furan-2-carboxylic acid ethyl ester; 3-\(4-Cyano-benzyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 3-methoxy-benzyl ester; 1-Methyl-2,4-dioxo-3-[4-(5-thioxo-4,5-dihydro-1,2,4-oxadiazol-3yl)-benzyl]-1,2,34-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide; 4-[6-(3-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid 10 2-dimethylamino-ethyl ester; 3-Cyclohexylmethy 1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide; 3-Cyclohexylmethyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carbox vic acid 4-methoxy-benzylamide; 15 3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6carboxylic acid furan-3-ylmethyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid pentafluorophenylmethyl ester; 3-Benzyl-1-ethyl-2,4-dioxo-1,2,3,4-tethahydro-thieno[2,3-20 d]pyrimidine-6-carboxylic acid benzyl ester; 3-Benzyl-1-cyclopropylmethyl-2,4-dioxo-12,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid (pyridin-4-ylmethyl)-amide 25 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thiano[2,3d]pyrimidine-6-carboxylic acid 3-bromo-benzyl ester; 4-[6-(3-Difluoromethoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-diliydro-2II-thiono[2,3-d]pyrimidin 3-ylmethyl]-benzoic acid; 4-[6-(3-Difluoromethoxy-benzylcarbamoyl)-1-methyl-2,4-diaxo-30 1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid tert-

butyl ester;

30

-233-4-[6-(3-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid; 4-[6-(4-Methanesulfonyl-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid tertbutyl ester; 4-[6-(4-Methanesulfonyl-benzylcarbamoyl)-1-methyl-2,4-dioxo-1.4-dihydro-2H thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid; 4-[1-Methxl-2,4-dioxo-6-(2-pyridin-4-yl-ethylcarbamoyl)-1,4dihydro-2H-thieno[2\(\frac{2}{3}\)-d]pyrimidin-3-ylmethyl]-benzoic acid;

1-Methyl-2,4-doxo-3-(4-trifluoromethoxy-benzyl)-1,2,3,4tetrahydro-thieno[2,3-d]p rimidine-6-carboxylic acid 3-methoxybenzylamide

4-[6-(3-Methoxy-benz carbamoyl)-1-methyl-2,4-dioxo-1,4dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid methyl ester;

3-(2,3-Dihydro-benzofuran 6-ylmethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxybenzylamide

1-Methyl-3-(2-methyl-thiazol-5-ylmethyl)-2,4-dioxo-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxybenzylamide

1-Methyl-2,4-dioxo-3-[4-(1H-tetrazol-5\yl)-benzyl]-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-fluorobenzylamide;

3-Benzyl-2-methoxy-4-oxo-3,4-dihydro-thien@[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

4-[6-(3-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acld 2,2dimethyl-propionyloxymethyl ester;

4-[6-(3-Methoxy benzylcarbamoyl)-1-methyl-2,4-dioxo1,4dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-cyclohexanecarboxylic acid;

20

15

25

30

4-[6-(3-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-cyclohexanecarboxylic acid methyl ester;

I\{4-[6-(3-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-phenyl}-cyclopropanecarboxylic acid methyl ester;

1-{4-[6-3-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-phenyl}-cyclopropanecarbox lic acid *tert*-butyl ester;

1-{4-[6-(3-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-phenyl}-cyclopropanecarboxylic acid;

2-{4-[6-(3-Methoxy-banzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-phenoxy}-2-methyl-propionic acid tert-butyl ester;

2-{4-[6-(3-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ymethyl]-phenoxy}-2-methyl-propionic acid;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-furo[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(3-Methoxy-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-Biphenyl-4-ylmethyl-1-methyl-2,4-dioxo-1,2,3 4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(4-Methanesulfonyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl exter;

3-(4-Methanesulfonyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester,

1-Methyl-3-(4-methyl-benzyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

ſIJ

25

30

1-Methyl-2,4-dioxo-3-phenethyl-1,2,3,4-tetrahydro-thieno[2,3dlpyrimidine-6-carboxylic acid benzyl ester;

3-(4-Amino-6-phenylamino-1,3,5-triazin-2-ylmethyl)-1-methyl-2,4-dioxo\1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester,

1-Methyl-2,4-dioxo-3-(4-trifluoromethyl-benzyl)-1,2,3,4tetrahydro-thieno(2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(6-Cyano hexyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-[2-(2,5-Dimethoxy-phenyl)-2-oxo-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(3-Iodo-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-2,4-dioxo-3-(3\trifluoromethyl-benzyl)-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidin 6-carboxylic acid benzyl ester;

3-(2,4-Bis-trifluoromethyl-beazyl)-1-methyl-2,4-dioxo-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-[2-(1,3-Dioxo-1,3-dihydro-isoindol-2-yl)-ethyl]-1-methyl-2,4dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-[2-(1,3-Dioxo-1,3-dihydro-isoindol-2\v1)-ethyl]-1-methyl-2,4dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine 6-carboxylic acid benzyl ester;

3-(2-Carboxy-allyl)-1-methyl-2,4-dioxo-1,2,3\4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester

3-(2-Carboxy-allyl)-1-methyl-2,4-dioxo-1,2,3,4-tatrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(3-Amino-propyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(1,3-Dioxo-1,3-dihydro-isoindol-2-ylmethyl)-1-methyl\2,4dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

L.

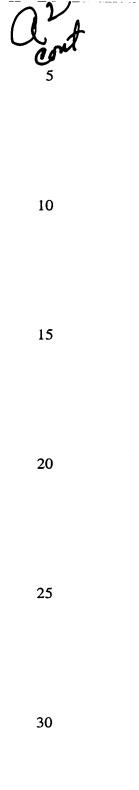
Ŋ

3-(4-Fluoro-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno 2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 1-Methyl-3-oxiranylmethyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 1-Methyl-3-((S)-2-methyl-butyl)-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 1-Methyl-2,4-dioxo-3-(4-phenoxy-butyl)-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-(2-Cyano-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-\(\delta\)-carboxylic acid benzyl ester; 1-Methyl-2,4-dioxo\3-(3-phenoxy-propyl)-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-Hex-5-enyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid beazyl ester; 1-Methyl-2,4-dioxo-3-pyridin-3-ylmethyl-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-[2-Hydroxy-3-(naphthalen-1-yloxy)-propyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 1,3-Dimethyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3dlpyrimidine-6-carboxylic acid benzyl ester; 3-Cyclobutylmethyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl aster; 3-Allyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid benzyl ester; 1-Methyl-2,4-dioxo-3-prop-2-ynyl-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid benzyl ester; 3-But-2-ynyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid benzyl ester; 1-Methyl-2,4-dioxo-3-(2-phonoxy-othyl)-1,2,3,4 tetrahydro thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-2,4-dioxo-3-(2-phenoxy-ethyl)-1,2,3,4-tetrahydro-

thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-((R)-3-Hydroxy-2-methyl-propyl)-1-methyl-2,4-dioxo-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic_acid_benzyl_ester; 3-Isobutyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid benzyl ester; 3-(6-Chloro-pyridin-3-ylmethyl)-1-methyl-2,4-dioxo-1,2,3,4tetrahydro-thie no[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-(2-Benzenesulfonylmethyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 1-Methyl-3-naghthalen-1-ylmethyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 10 1-Methyl-2,4-dioxo3-(2-trifluoromethyl-benzyl)-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-(3-Chloro-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carbox lic acid benzyl ester; 3-(4-Methoxycarbonyl-butyl) 1-methyl-2,4-dioxo-1,2,3,4-15 tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-Ethyl-1-methyl-2,4-dioxo-1,2,3\(\frac{1}{2}\)-tetrahydro-thieno[2,3dlpyrimidine-6-carboxylic acid benzyl estery 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3dlpyrimidine-6-carboxylic acid 4-fluoro-benzyl ester; 20 3-[2-(4-Chloro-benzenesulfonyl)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-(2-Acetoxy-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-25 d]pyrimidine-6-carboxylic acid 2-phenoxy-ethyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thien [2,3d]pyrimidine-6-carboxylic acid benzyl ester; 3-Bonzyl-1-mothyl-2,4-dioxo 1,2,3,4-tetrahydro-thieno[2, 30 d]pyrimidine-6-carboxylic acid benzylamide; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 2,6-dichloro-benzyl ester;



3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-
d]pyrimidine-6-carboxylic acid butyl ester;
3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-
d]pyrimidine-6-carboxylic acid 2,3-dihydro-1,4-benzodioxin-2-ylmethyl
ester;
3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-
d]pyrimidine-o-carboxylic acid 2-diethylamino-1-methyl-ethyl ester;
3-Benzyl 1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-
d]pyrimidine-6-carboxylic acid 4-fluoro-benzyl ester;
3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-
d]pyrimidine-6-carbox lic acid 4-isopropyl-benzyl ester;
3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-
d]pyrimidine-6-carboxylic acid 2-p-tolyl-ethyl ester;
3-Benzyl-1-methyl-2,4dioxo-1,2,3,4-tetrahydro-thieno[2,3-
d]pyrimidine-6-carboxylic acid trifluoromethyl-benzyl ester;
3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-
d]pyrimidine-6-carboxylic acid cyclobutylmethyl ester;
3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-
d]pyrimidine-6-carboxylic acid 2,6-difluoro-benzyl ester;
3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-
d]pyrimidine-6-carboxylic acid 2-(2-hydroxy-phenyl)-ethyl ester;
3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-
d]pyrimidine-6-carboxylic acid 2-(2-hydroxy-pheryl)-ethyl ester;
3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-
d]pyrimidine-6-carboxylic acid 1-methyl-piperidin-4-x ester;
3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-hieno[2,3-
d]pyrimidine-6-carboxylic acid 1-methyl-piperidin-4-yl ester;
3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thie o[2,3-
d]pyrimidine-6-carboxylic acid pyridin-3-ylmethyl ester;
3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[23-
d]pyrimidine-6-carboxylic acid 3-pyridin-3-yl-propyl ester;
3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-

d]pyrimidine-6-carboxylic acid 2-dimethylamino-1-methyl-ethyl ester;

30

25

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzyl ester;

3 Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidiqe-6-carboxylic acid tetrahydro-pyran-4-yl ester;

- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6 carboxylic acid 2,2,2-trifluoro-1-trifluoromethyl-ethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-trifluoromethyl-benzyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-benzyloxy-ethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2,2,2-trichloro-ethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid phenethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-ethyl-exetan-3-ylmethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3 4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-morpholin 4-yl-ethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-pyrrolidin-1-yl ethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-pyrrolidin-1-yl-ethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-(2-ethoxy-ethoxy)-ethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid tetrahydro-pyran-2-ylmethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno 2,3-d]pyrimidinc-6-carboxylic acid 4 nitro-benzyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid pentyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-phenyl-propyl ester;

ΠJ

-240-3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]py/imidine-6-carboxylic acid 3-phenoxy-benzyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 3,5-dimethoxy-benzyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3dlpyrimidine 6-carboxylic acid 3-methyl-butyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 4-chloro-benzyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 1-ethyl-piperidin-3-yl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 4-benzyloxy-benzyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid isobutyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 3-(4-methoxy-phenyl)-propyl ester; 3-Benzyl-1-methyl-2,4-dioxo\1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 2-chlord-6-fluoro-benzyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,\(\),4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid (S)-(tetrahydro-furan-3-yl) ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 3-methoxy-benzyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 3-methoxy-benzyl exter; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 3-pyridin-2-yl-propyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 2-piperidin-2-yl-ethyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thien@[2,3-

d]pyrimidine-6-carboxylic acid 5-bromo-2-methoxy-benzyl ester;

dlpyrimidine-6-carboxylic acid cycloheptylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-Apyrimidine-6-carboxylic acid 1,2,3,4-tetrahydro-naphthalen-1-yl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyringidine-6-carboxylic acid (S)-1-pyrrolidin-2-ylmethyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidina-6-carboxylic acid 3-chloro-benzyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 1,3-benzodioxol-5-ylmethyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 4-methylsulfanyl-benzyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 4-methylsulfanyl-benzyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 3,4-dichloro-benzyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 3,3-diphenyl-propyl ester; 3-Benzyl-1-methyl-2,4-dioxo-\\2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 2-pyridin 2-yl-ethyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid furan-3-ylmethyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid but-3-enyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 2-cyano-ethyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 2-ethoxy-ethyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-theno[2,3d]pyrimidine-6-carboxylic acid cyano-phenyl-methyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4 tetrahydro-thien&[2,3d]pyrimidine-6-carboxylic acid 4-trifluoromethyl-benzylamide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3

d]pyrimidine-6-carboxylic acid 4-methyl-benzylamide;

10 15 Щ ΠJ 20

25

30

`	$\sqrt{3}$ -Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3
d]pyri	midine-6-carboxylic acid phenethyl-amide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine 6-carboxylic acid cyclopropylamide;

1-Methyl-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-(4-sulfamoyl-benzyl)-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

1-Methyl-2,4-didxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6carboxylic acid 3-methoxy benzylamide;

1-Methyl-2,4-dioxo-3 (3-oxo-3-phenyl-propyl)-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

3-[4-(N-Hydroxycarbaminaidoyl)-benzyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrmidine-6-carboxylic acid 4-methoxybenzylamide;

1-Methyl-2,4-dioxo-3-[4-(5-oxo\4,5-dihydro-1,2,4-oxadiazol-3-yl)benzyl]-1,2,3,4-tetrahydro-thieno[2,3-d]p rimidine-6-carboxylic acid 4methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-[4-(5-thioxo-4,3-dihydro-1,2,4-oxadiazol-3yl)-benzyl]-1,2,3,4-tetrahydro-thieno[2,3-d]pyri\nidine-6-carboxylic acid 4-methoxy-benzylamide;

4-(5-Isopropyl-2H-pyrazol-3-yl)-pyridine;

3-Cyanomethyl-1-methyl-2,4-dioxo-1,2,3,4-terahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamid

(E)-4-[6-(4-Methoxy-benzylcarbamoyl)-1-methyl2,4-dioxo-1,4dihydro-2H-thieno[2,3-d]pyrimidin-3-yl]-but-2-enoic acid hethyl ester;

(E)-4-[6-(4-Methoxy-benzylcarbamoyl)-1-methyl-2,4\dioxo-1,4dihydro-2H-thieno[2,3-d]pyrimidin-3-yl]-but-2-enoic acid;

3-(2-Benzenesulfonyl ethyl)-1-methyl-2,4-dioxo-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxybenzylamide;

Cont 5

10

15

20

25

30

	2-Methoxy-4-[6-(4-methoxy-benzylcarbamoyl)-1-methyl-2,4-
dioxo-	1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid
methy	ester;

3-(2-Methoxymethyl-1,1,3-trioxo-2,3-dihydro-1H-1 l^6 -1,2-benzisothiazol-6-ylmethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d] pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

1-Methyl-3-oct-2-ynyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-[2-(4-Chloro-benzenesulfonylamino)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thiero[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-[2-(4-Bromo-pherioxy)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-[2-(4-Bromo-phenoxy)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-o-carboxylic acid 3-methoxy-benzylamide;

3-[2-(4-Fluoro-phenoxy)-ethyl]-1 methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-[2-(4-Chloro-benzenesulfonyl)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-[2-(4-Fluoro-phenoxy)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid (2-methoxy-pyridin-4-ylmethyl)-amide;

3-Cyclonexylmethyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide



.

10

15

20

25

30

16.

	4-[6-(4-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-
dhydro	-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-2-methyl-benzoic acid
methyl o	ester;

- 4-[6-(4-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid methyl ester;
- 2-Mathoxy-4-[6-(3-methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid methyl ester;
- 4-[6-(3-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-2-methyl-benzoic acid methyl ester;
- 1-Methyl-2,4-diox -3-(3-oxo-3-phenyl-propyl)-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;
- 3-[2-(4-Chloro-phenoxy)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;
- 1-Methyl-2,4-dioxo-3-[2-(3-trifluoromethyl-benzenesulfonyl)-ethyl]-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;
- 1-Methyl-2,4-dioxo-3-[2-(3-trifluoromethyl-benzenesulfonyl)-ethyl]-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;
- 3-[2-(4-Chloro-benzenesulfonyl)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide; and
- 3-(2-Amino-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide.
- The compound according to Claim 1, selected from:
 - 1-Methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid;
 - 4-(6-Carbamoyl-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,8-d]pyrimidin-3-ylmethyl)-2-methyl-benzoic acid;

30

5

17.

-245-4-(6-Carbamoyl-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3d]pynmidin-3-ylmethyl)-2-methyl-benzoic acid methyl ester; 4-[6-(3-Hydroxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4dihydro-2N-thieno[2,3-d]pyrimidin-3-ylmethyl]-2-methyl-benzoic acid; 4-(6-Carbamoyl-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3d]pyrimidin-3-\(\)\left\[\]\left\[\]\right\[\]\right 3-(2-Amino-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide; and 4-(2,5-Di-pyridin-4-yl-thiophen-3-yl)-benzaldehyde. The compound according to Claim 1, selected from: 1-Methyl-2,4-dioxo-3-(1-phenyl-ethyl)-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide; 1-Methyl-2,4-dioxo-3-(3-oxo-3-phenyl-propyl)-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide; $3-((S)-3,7-Dimethyl-oct-6-en\chi l)-1-methyl-2,4-dioxo-1,2,3,4$ tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxybenzylamide; 3-(2-Ethyl-hexyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide; 3-(5-Cyano-pentyl)-1-methyl-2,4-dioxo\1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide; 3-(E)-But-2-enyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid 4-methox) benzylamide; 1-Methyl-3-(2-naphthalen-1-yl-ethyl)-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide; 1-Methyl-2,4-dioxo-3-(E)-pent-2-enyl-1,2,3,4-tetral ydrothieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide; 1-Methyl-2,4-dioxo-3-(2-phenylsulfanyl-ethyl)-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide; 3-sec-Butyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[\(\frac{\lambda}{\lambda}\)3-

d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

20

15

25

30

1-M	ethyl-3-(2-methyl-allyl)-2,4-dioxo-1,2,3,4-tetrahydro-
thieno[2,3-d	hyrimidine-6-carboxylic acid 4-methoxy-benzylamide

3-(1-Ethyl-propyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-pent-2-ynyl-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-(2-Benzenesulfonyl-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

1-Methyl-3-(3-methylbut-2-enyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carbaxylic acid 4-methoxy-benzylamide;

3-[2-(4-Fluoro-benzenesul fonyl)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-[2-(toluene-4-sulfonyl)-ethyl]-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-[3-(4-Fluoro-phenyl)-3-oxo-propyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-[3-(4-Chloro-phenyl)-3-oxo-propyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-(2-Benzoylamino-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-[2-(4-Bromo-phenoxy)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-Benzofurazan-5-ylmethyl-1 methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-(2-phenoxy-ethyl)-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

30

{5-[6-(4-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-isoxazol-3-yl}-carbamic_ acid methyl ester;

3-Benzylox yearbonylamino-5-[6-(4-methoxy-benzylearbamoyl)-1methyl-24-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-yl]-4-oxopentanoic acid tert-butyl ester;

3-[2-\4-Chloro-phenylsulfanyl)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxybenzylamide;

1-Methyl-24-dioxo-3-(1-phenyl-ethyl)-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-(E)-pent-2-enyl-1,2,3,4-tetrahydrothieno[2,3-d]pyrimdine-carboxylic acid 3-methoxy-benzylamide;

3-(2-Ethyl-hexyl)-\(\frac{1}{2}\)-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-\2-phenylmethanesulfonyl-ethyl)-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxybenzylamide;

3-(5-Cyano-pentyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

3-(E)-But-2-enyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-3-(2-naphthalen-1-yl-ethyl)-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid 3\methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-(E)-pent-2-enyl 1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-(2-phenylsulfanyl-ethyl)-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

3-sec-Butyl-1-methyl-2,4-dioxo-1,2,3,4-tetraltydro-thicno[2,3d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-3-(2-methyl-allyl)-2,4-dioxo-1,2,3,4-te rahydrothieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-bentylamide;

3-(1-Ethyl-propyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide; Methyl-2,4-dioxo-3-pent-2-ynyl-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide; 1-Methyl-3-(3-methyl-but-2-enyl)-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl 2,4-dioxo-3-[2-(toluene-4-sulfonyl)-ethyl]-1,2,3,4tetrahydro-thieno[\(\frac{1}{2}\)3-d]pyrimidine-6-carboxylic acid 3-methoxybenzylamide;

3-(2-Benzoylamino-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-&-carboxylic acid 3-methoxy-benzylamide;

3-[2-(4-Bromo-phenoxy)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxybenzylamide;

3-Benzofurazan-5-ylmethyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxyllc acid 3-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-(2-phenoxy-ethyl)-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

{5-[6-(3-Methoxy-benzylcarbamoxl)-1-methyl-2,4-dioxo-1,4dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-isoxazol-3-yl}-carbamic acid methyl ester; and

3-Benzyloxycarbonylamino-5-[6-(3-methoxy-benzylcarbamoyl)-1methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-yl]-4-oxopentanoic acid tert-butyl ester.

18. The compound according to Claim 1, selected from:

> 3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3 \d]pyrimidine-6-carboxylic acid benzyl ester;

3-Donzyl-1-mothyl-2,4 dioxo-1,2,3,4-tetrahydro-thieho[2,3d|pyrimidine-6-carboxylic acid benzyl ester;

3-(4-Pyridyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid benzyl ester;

20

10

15

25

30

10

15

20 25 30

3-(4-Pyridyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-Renzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylicacid (4-pyridyl) ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-darboxylic acid (4-pyridyl) ester;

3-(4-Pyrid)()-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid (4-pyridyl) ester;

3-(4-Pyridyl)-1 methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid (4-pyridyl) ester;

3-Benzyl-2,4-dioxo-\,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid piperoyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3dpyrimidine-6-carboxylic acid piperoyl ester;

3-Piperoyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid piperoyl ester;

3-Piperoyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid piperoyl estek;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4\tetrahydro-furo[2,3dpyrimidine-6-carboxylic acid benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-1*H*-pyrrolo[2,3d]-pyrimidine-6-carboxylic acid benzyl ester;

3-Benzyl-1,7-dimethyl-2,4-dioxo-1,2,3,4-tetrahydro-1*H*pyrrolo[2,3-d]-pyrimidine-6-carboxylic acid benzyl ester;

3-Benzyl-1,7-dimethyl-2,4-dioxo-1,2,3,4-tetrahydro-1Hpyrrolo[2,3-d]-pyrimidine-6-carboxylic acid benzofuran-6\vlmethyl ester;

3-Benzyl-1-dimethyl-2,4-dioxo-1,2,3,4-tetrahydro-1\(\bar{\mathbb{N}}\)-pyrrolo[2,3dl-pyrimidine-6-carboxylic acid benzofuran-6-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-furo[2,3 dpyrimidine-6-carboxylic acid benzofuran-6-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3dpyrimidine-6-carboxylic acid benzofuran-6-ylmethyl ester;

19.

15

20

25

30

	3-Benzyl-1,7-dimethyl-2,4-dioxo-1,2,3,4-tetrahydro-1 <i>H</i> -
pyrrold	(2,3-d]-pyrimidine-6-carboxylic acid benzothiophene-6-ylmethyl
ester;	

3-Berzyl-1-dimethyl-2,4-dioxo-1,2,3,4-tetrahydro-1*H*-pyrrolo[2,3-*d*]-pyrimidine-6-carboxylic acid benzothiophene-6-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-furo[2,3-d]pyrimidine-6-carboxylic acid benzothiophene-6-ylmethyl ester; and

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzothiophene-6-ylmethyl ester.

A compound according to Claim 1, or a pharmaceutically acceptable salt thereof, selected from:

3-(3-Methoxy-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxyllc acid benzyl ester;

3-(4-Chloro-benzyl)-1-methyl 2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(4-Cyano-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(4-Fluoro-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(3-Chloro-benzyl)-1-methyl-2,4-dioxo-12,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-3-(2-methyl-benzyl)-2,4-dioxo-1,2,3 4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-3-(4-methyl-benzyl)-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(4-Carboxy-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-2,4-dioxo 3-(3-trifluoromethyl-benzyl)-1,2,3,4\ tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester,

3-Biphenyl-4-ylmethyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-2,4-dioxo-3-(2-trifluoromethyl-benzyl)-1,2,3,4tetrah dro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3,(3-Cyano-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3\d]pyrimidine-6-carboxylic acid benzyl ester; 3-(2-\(\nabla\)yano-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]p rimidine-6-carboxylic acid benzyl ester; 1-Methyl 2,4-dioxo-3-(4-trifluoromethyl-benzyl)-1,2,3,4tetrahydro-thieno[λ_3 -d]pyrimidine-6-carboxylic acid benzyl ester; 3-[2-Hydroxy\3-(naphthalen-1-yloxy)-propyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-(3-Chloro-benz))-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 1-Methyl-3-naphthalen-1-ylmethyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-(6-Chloro-benzo[1,3]dioxol-5-ylmethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 1-Methyl-2,4-dioxo-3-(4-oxo-4-thiophen-2-yl-butyl)-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 1-Methyl-2,4-dioxo-3-pyridin-4-ylanethyl-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 1-Methyl-2,4-dioxo-3-(4-m-tolyloxy-batyl)-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-(3,5-Dimethyl-isoxazol-4-ylmethyl)-1-methyl-2,4-dioxo-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-Dioxo-1,3-dihydro-isoindol-2-ylmethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxyli\(\delta\) acid benzyl ester; 3-Dihydro-benzo[1,4]dioxin-2-ylmethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 1-Methyl-2,4-dioxo-3-pyridin-2 ylmethyl-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-[2-(2,5-Dimethoxy-phenyl)-2-oxo-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzy\tester; 10 =

20

15

25

30

3-Benzyloxymethyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro
thieno[2,3\d]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-2,4-dioxo-3-(4-*m*-tolyloxy-butyl)-1,2,3,4-tetrahydro-thieno[2,3-*d*]p rimidine-6-carboxylic acid benzyl ester;

1-Methyl 2,4-dioxo-3-(2-phenylmethanesulfonyl-ethyl)-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(4-Amino-6-phenylamino-[1,3,5]triazin-2-ylmethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-[4-(4-Fluoro-phenyl)-4-oxo-butyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrmidine-6-carboxylic acid benzyl ester;

3-[4-(1,3-Dioxo-1,3-dhydro-isoindol-2-yl)-butyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thienol2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-2,4-dioxo-3-(4-phenoxy-butyl)-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-2,4-dioxo-3-(4-oxo-4-phenyl-butyl)-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-2,4-dioxo-3-(2-phenoxy-ethyl)-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid beneyl ester;

3-{3-[4-(3-Chloro-phenyl)-piperazin-1-y]-propyl}-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-[1-Bromo-2-(1H-indol-3-yl)-ethyl]-1-methyl 2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(2-Benzenesulfinyl-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-[3-(3-Fluoro-phenylcarbamoyl)-propyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-a]pyrimidinc-6-carboxylic acid beazyl ester;

1-Methyl-2,4-dioxo-3-[2-(2-trifluoromethyl-phenylcarbamoyl)-ethyl]-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(5-Methoxycarbonyl-furan-2-ylmethyl)-1-methyl-2,4-dioxo-

1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-[2-(4-Methoxy-phenyl)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4tetrah dro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3\[2-(4-Chloro-2-nitro-phenoxy)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 1-Methyl-3-(5-nitro-furan-2-ylmethyl)-2,4-dioxo-1,2,3,4tetrahydro-thien [2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-(1-Benzyl-1H-imidazol-2-ylmethyl)-1-methyl-2,4-dioxo-1,2,3,4tetrahydro-thieno[2,3\d]pyrimidine-6-carboxylic acid benzyl ester; 3-[3-(Benzyl-methyl-amino)-propyl]-1-methyl-2,4-dioxo-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidine-6 -carboxylic acid benzyl ester; 10 3-(Bis-trifluorometh) -1-methyl-2,4-dioxo-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-[3-(2-Bromo-4-methyl-henoxy)-propyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-Benzenesulfonylmethyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-15 thieno[2,3-d]pyrimidine-6-carboxylic acld benzyl ester; 3-[2-(4-Chloro-benzenesulfonyl)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6 carboxylic acid benzyl ester; 3-Benzo[1,3]dioxol-5-ylmethyl-1-methyl-2,4-dioxo-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 20 3-(3-Iodo-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 1-Methyl-2,4-dioxo-3-(4-trifluoromethoxy-benzyl)-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid beneyl ester; 3-(4-Acetoxy-butyl)-1-methyl-2,4-dioxo-1,2,3,4-tetkahydro-25 thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-(4-Methanesulfonyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 1-Methyl-2,4-dioxo-3-(4-[1,2,3]thiadiazol-4-yl-benzyl)-1,2\3,4-30 tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

(2-Carboxy-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3\d]pyrimidine-6-carboxylic acid benzyl ester; 10 15 20 d]pyrimidine-6-carboxylic acid benzyl ester; 25

dpyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-2,4-dioxo-3-(3-pyrrol-1-yl-propyl)-1,2,3,4-tetrahydrothieno[2,3-d]p\rimidine-6-carboxylic acid benzyl ester; 3-(3-Cardoxy-propyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrin idine-6-carboxylic acid benzyl ester; 3-(2-Cyano-athyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-(3-Ethoxycarbonyl-furan-2-ylmethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-(3-Amino-propyl) 1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-ca boxylic acid benzyl ester; 3-(3-Cyano-propyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-(2-Hydroxy-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-(2-Carboxy-hexyl)-1-methyl 2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic adid benzyl ester; 1-Methyl-2,4-dioxo-3-(2,2,2-trifluoro-ethyl)-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid henzyl ester; 1-Methyl-2,4-dioxo-3-(2,2,2-trifluoro ethyl)-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxyl carboxylicacid benzyl ester; Iodomethyl-1-methyl-2,4-dioxo-1,2,3,4-detrahydro-thieno[2,3-3-(2-Fluoro-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; Methyl-2,4-dioxo-3-(tetrahydro-furan-2-ylmethyl)-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-[1-(4-Carboxy-phenyl-ethyl]-1-methyl-2.4-diox\d-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-(Hex-5-enyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro{thieno[2,3-

-255-3-(2-Ethyl-butyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno (2,3-d) pyrimidine-6-carboxylic acid benzyl ester; -Methyl-2,4-dioxo-3-(2,2,2-trifluoro-ethyl)-1,2,3,4-tetrahydrothieno[2,3 d]pyrimidine-6-carboxyl pyrimidine acid benzyl ester; 3-(Diethoxy-phosphorylmethyl)-1-methyl-2,4-dioxo-1,2,3,4tetrahydro-thiano[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-But-2-\rule_nyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3dpyrimidine-6-carboxylic acid benzyl ester; Bromo-ethyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid; 1-Methyl-2,4-didxo-3-[2-(tetrahydro-pyran-2-yloxy)-ethyl]-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 1-Methyl-2,4-dioxo-\(\frac{3}{2}\)-propyl-1,2,3,4-tetrahydro-thieno[2,3dpyrimidine-6-carboxylic acid benzyl ester; 3-(2-Acetoxy-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carbox lic acid; 3-Butyl-1-methyl-2,4-dioxo\1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid benzy ester; 3-Isobutyl-1-methyl-2,4-dioxo-\,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid benzyl ester; 3-Ethyl-1-methyl-2,4-dioxo-1,2,3,4\tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid benzyl ester; 3-(3-Bromo-propyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-Cyclohexylmethyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl exter; 3-(2-Ethylamino-ethyl)-1-methyl-2,4-dioxo-1\2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester 3-Cyclobutylmethyl 1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-((R)-3-Hydroxy-2-methyl-propyl)-1-methyl-2,4-dloxo-1,2,3,4-

tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(4-Hydroxy-butyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno 2,3-d pyrimidine-6-carboxylic acid benzyl ester; 3\(2-Ethoxy-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3 \sqrt{d}]pyrimidine-6-carboxylic acid benzyl ester; 3-Isobutyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-occarboxylic acid benzyl ester; 3-(2-Chloro-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 1-Methyl-3-(3-methyl-but-2-enyl)-2,4-dioxo-1,2,3,4-tetrahydro-10 thieno[2,3-d]pyrimiding-6-carboxylic acid benzyl ester; 3-Allyl-1-methyl 2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic cid benzyl ester; 3-(2,2-Dimethoxy-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 1-Methyl-3-oxiranylmethyl-2,4-dioxo-1,2,3,4-tetrahydro-15 thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 1-Methyl-2,4-dioxo-3-propyl-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid benzyl ester; 3-Benzo[1,2,5]oxadiazol-5-ylmethyl-1-methyl-2,4-dioxo-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidine-6-carb\(xylic acid benzyl ester; 20 3-(3-Hydroxy-2,2-dimethyl-propyl)-1 methyl-2,4-dioxo-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-(2-Carboxy-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl aster; 25 3-Propyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3dpyrimidine-6-carboxylic benzyl ester; 1-Methyl-2,4-dioxo-3-(4-sulfamoyl-benzyl)-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 1-Methyl-3-(4-methylsulfamoyl-benzyl) 2,4-dioxo-12,3,4-30 tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl exter; 3-(4-Dimethylsulfamoyl-benzyl)-1-methyl-2,4-dioxo-1, λ 3,4tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester

3-(4-Methanesulfonylamino-benzyl)-1-methyl-2,4-dioxo-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-[4-(Methanesulfonyl-methyl-amino)-benzyl]-1-methyl-2,4 $dioxo-\frac{1}{3}$, 2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-(4\Acetylamino-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]p\rimidine-6-carboxylic acid benzyl ester; 3-[4-(Acetyl-methyl-amino)-benzyl]-1-methyl-2,4-dioxo-1,2,3,4tetrahydro-thieno[2\forall -d]pyrimidine-6-carboxylic acid benzyl ester; 3-(4-Dimethylamino-benzyl)-1-methyl-2,4-dioxo-1,2,3,4tetrahydro-thieno[2,3-d] pyrimidine-6-carboxy lic acid benzyl ester; 1-Methyl-3-(4-methylamino-benzyl)-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-(4-Carbamoyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-(4-Dimethylcarbamoyl-beazyl)-1-methyl-2,4-dioxo-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-(4-Carboxy-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-(4-Methoxycarbonyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-{4-[Bis-(2-hydroxy-ethyl)-amino]-benyl}-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-(3,5-Dimethoxy-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-(4-tert-Butyl-benzyl)-1-methyl-2,4-dioxo-1,2,\(\),4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 1-Methyl-2,4-dioxo-3-(4-trifluoromethoxy-benzyl)-1,2,3,4tetrahydro-thieno[2,3-a]pyrimidine-6-carboxylic acid benzyl ester; 3-(4-Methanesulfonyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 2,4-Dioxo-3-[1,3,4]thiadiazol-2-ylmethyl-1,2,3,4-tetrahydra-

thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

30

3-Isoxazol-3-ylmethyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic-acid benzyl-ester;

3 Oxazol-2-ylmethyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

2,4-Dioxo-3-thiazol-2-ylmethyl-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(1*H*-Imidazol-2-ylmethyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(1-Methyl-1) imidazol-2-ylmethyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d] pyrimidine-6-carboxylic acid benzyl ester;

3-(1-Methyl-1*H*-pytrol-2-ylmethyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

2,4-Dioxo-3-(1*H*-pyrrol-2-ylmethyl)-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

2,4-Dioxo-3-(1*H*-pyrrol-2-)lmethyl)-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

2,4-Dioxo-3-thiophen-2-ylmethyl-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl exter;

2,4-Dioxo-3-[1,2,3,4]tetrazin-5-ylmethyl-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

2,4-Dioxo-3-[1,2,4,5]tetrazin-3-ylmethyl-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(1-Methyl-piperidin-4-ylmethyl)-2,4-didxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl exter;

2,4-Dioxo-3-pyrimidin-2-ylmethyl-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

2,4-Dioxo-3-(2*H*-pyran-2-ylmethyl)-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(1*H*-Imidazo[4,5-b]pyridin-2-ylmethyl)-2,4 dioxe\1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6 -carboxylic acid benzyl ester;

3-(1*H*-Benzoimidazol-2-ylmethyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-Benzo[b]thiophen-2-ylmethyl-2,4-dioxo-1,2,3,4-tetrahydrothien of 2,3-d pyrimidine-6-carboxylic acid benzyl ester; %4-Dioxo-3-quinolin-2-ylmethyl-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid benzyl ester; 3-(2)X-Chromen-2-ylmethyl)-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]p rimidine-6-carboxylic acid benzyl ester; 3-(1H-Benzoimidazol-2-ylmethyl)-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-(1-Methyl-M-benzoimidazol-2-ylmethyl)-2,4-dioxo-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-(1H-Indol-2-ylmethyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid benzyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid furan-3-ylmethyl ester; 3-Benzyl-1-methyl-2,4-diaxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 1-ethyl-propyl ester; 3-Benzyl-1-methyl-2,4-dioxo\1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 1,1-dio o-tetrahydro-116-thiophen-3-yl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3dpyrimidine-6-carboxylic acid 4-hydroxy-benzyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3dpyrimidine-6-carboxylic acid 1-oxy-pyridin-4-xlmethyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3dlpyrimidine-6-carboxylic acid but-3-enyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydra-thieno[2,3dpyrimidine-6-carboxylic acid 3-diethylamino-propyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-theno[2,3d]pyrimidine-6-carboxylic acid 1-cyano-1-phenyl-methyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thiend(2,3dpyrimidine-6-carboxylic acid 3-amino-benzyl ester;

30

	3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-th	nieno[[2,3-
d]pyr	invidine-6-carboxylic acid 3-methoxy-benzyl ester;		

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3dpyrimidine-6-carboxylic acid 1-oxy-pyridin-3-ylmethyl ester;

3-Benayl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 2-ethoxy-ethyl ester;

3-Benzyl-1, methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid thiophen-2-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxyllc acid 2,6-dichloro-benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acld dimethylamino-methyl-ethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 2,\(\frac{1}{2}\)-diphenyl-ethyl ester;

3-Benzyl-1-methyl-2,4-diox\(\frac{1}{2},3,4\)-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 2-pyridin -2-yl-ethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,\(\frac{1}{2}\)3,4-tetrahydro-thieno[2,3dpyrimidine-6-carboxylic acid 2-ethanesulfonyl-ethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4\tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid diethylamino-nethyl-ethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid dimethylamino-methyl-propyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3dpyrimidine-6-carboxylic acid 2-(2-chloro-phenoxy)-athyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-hieno[2,3d]pyrimidine-6-carboxylic acid 2-(2-ethoxy-ethoxy)-ethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thie\o[2,3dpyrimidine-6-carboxylic acid 2-hydroxy-benzyl ester;

1-Methyl-2,4-dioxo-1,2,3,4 tetrahydro-thieno[2,3-d]pyrimidine-6carboxylic acid 2-morpholin-4-yl-ethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 2-(1,3-dioxo-1,3-dihydro-isoindol-2-y))ethyl ester;

25

30

	3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-
d]pyki	midine-6-carboxylic acid 2,3-dihydro-benzo[1,4]dioxin-2-ylmethyl
ester;	

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimiding-6-carboxylic acid 1-methyl-piperidin-4-yl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-(4-hydroxy-phenyl)-ethyl ester;

3-Benzyl-1 methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-cyano-ethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylioacid hexyl ester;

3-Benzyl-1-methyl-24-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-fluoro-benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-hydroxy-6-methyl-pyridin-2-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-12,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-benzyloxy-ethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3\d-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-methoxy-benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2,2,2-trifluoro-ethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2,2,2-trichloro-ethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thjeno[2,3-d]pyrimidine-6-carboxylic acid pyridin-3-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxc-1,2,3,4-tetrahydro-thien\(\)[2,3-d]pyrimidine-6-carboxylic acid pyridin-4-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3,d]pyrimidine-6-carboxylic acid 3-pyridin-3-yl-propyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]p rimidine-6-carboxylic acid; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 2-phenoxy-ethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine 6-carboxylic acid 1,3-dimethyl-butyl ester;

3-Benz 1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 2-methyl-benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 1-phenyl-ethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxyli λ acid 1-benzyl-piperidin-4-yl ester;

3-Benzyl-1-methyl-24-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid propyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid methyl ester;

3-Benzyl-1-methyl-2,4-diox $\delta_{-1,2,3,4}$ -tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 2-trifluoromethyl-benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1, λ 3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 2-p-tolyl-ethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4\tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 4-trifluoromethyl-benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid tetrahydro-furan-2√ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3dpyrimidine-6-carboxylic acid octahydro-inden-5-yl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 4-amino-benzyl ester;

3-Benzyi-1-methyl-2,4-dloxo-1,2,3,4-tetrahydro-thicho[2,3d]pyrimidine-6-carboxylic acid 2-aziridin-1-yl-ethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3dpyrimidine-6-carboxylic acid 3-methyl-but-2-enyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d pyrimidine-6-carboxylic acid benzyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid trifluoro-trifluoromethyl-ethyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidin 6-carboxylic acid phenethyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 2-methoxy-ethyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid biphenyl-4-ylmethyl ester; 10 3-Benzyl-1-meth \(\frac{1}{2}\), 2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 2-chloro-6-fluoro-benzyl ester; 3-Benzyl-1-methyl-2,4dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid tetrahydro-pyran-4-yl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-15 d]pyrimidine-6-carboxylic acid 3-ethyl-oxetan-3-ylmethyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3dpyrimidine-6-carboxylic acid butyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 2-(2-hydroxy-phenyl)-ethyl ester; 20 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 2-(4-fluoro-phenyl)-ethyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3dlpyrimidine-6-carboxylic acid cyclopropylmethyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro thieno[2,3-25 dpyrimidine-6-carboxylic acid 4-ethyl-benzyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thiano[2,3dpyrimidine-6-carboxylic acid (S)-1-phenyl-ethyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3dpyrimidine-6-carboxylic acid 2,6-difluoro-benzyl ester; 30 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3dpyrimidine-6-carboxylic acid cyclobutyl methyl ester;

10 ester; 15 tert-butyl ester; 20 25 carboxylic acid [1,4,2]dioxazol-3-ylmethyl ester; 30

-264-3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3dpyrinidine-6-carboxylic acid 2-pyridin-4-yl-ethyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimiding-6-carboxylic acid 3-hydroxy-cyclopentyl ester; 3-Ben2yl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 1-pentafluorophenyl-ethyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 2-benzyloxycarbonylamino-ethyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid ethyl ester; 2-{[1-(3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidin-6-yl)-methanoyl]-anino}-3-phenyl-propionic acid methyl $(3-\{[1-(3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-1,2,3,4-tetra$ thieno[2,3-d]pyrimidin-6-yl)-methanoyl]-amino}-propyl)-carbamic acid 3-Benzyl-1-methyl-2,4-dioxo-1,2,\(\),4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid benzofuran 5-ylmethyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid benzofuran-2-ylmethyl ester; 3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6carboxylic acid thiophen-3-ylmethyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 3H-[1,2,3]oxathiazol-5\ylmethyl ester; 3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3,d]pyrimidine-6carboxylic acid 3H-[1,2,3]oxathiazol-5-ylmethyl ester; 3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d] hyrimidine-6-

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thienol2.3dpyrimidine-6-carboxylic acid [1,4,2]dioxazol-3-ylmethyl ester;

3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimid\ne-6carboxylic acid furazan-3-ylmethyl ester;

\Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3dpyrimidine-6-carboxylic acid furazan-3-ylmethyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-o-carboxylic acid [1,2,4]oxadiazol-5-ylmethyl ester; 3-Benzyl 2.4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6carboxylic acid [1,2,4]oxadiazol-5-ylmethyl ester; 3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6carboxylic acid $3H-[1,\lambda]$ triazol-4-ylmethyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 3H-[1,2,3]triazol-4-ylmethyl ester; 3-Benzyl-1-methyl-2,4dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid λH -[1,2,4]triazol-3-ylmethyl ester; 3-Benzyl-2,4-dioxo-1,2,3,4 tetrahydro-thieno[2,3-d]pyrimidine-6carboxylic acid 2*H*-[1,2,4]triazol-3-\(\frac{1}{2}\)methyl ester; 3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6carboxylic acid isoxazol-5-ylmethyl estek; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3\4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid isoxazol-5-y|methyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3dpyrimidine-6-carboxylic acid oxazol-2-ylmethyl ester; 3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thiono[2,3-d]pyrimidine-6carboxylic acid oxazol-2-ylmethyl ester; 3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno 2,3-d]pyrimidine-6carboxylic acid isothiazol-5-ylmethyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-hieno[2,3dpyrimidine-6-carboxylic acid isothiazol-5-ylmethyl ester 3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d] hyrimidine-6-

carboxylic acid thiazol-2-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-letraliydi o-thieiio 2,3d]pyrimidine-6-carboxylic acid thiazol-2-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3] d]pyrimidine-6-carboxylic acid 1*H*-imidazol-2-ylmethyl ester;

carboxylic acid 1*H*-pyrazol-3-ylmethyl ester; 10 carboxylic acid 2*H*-pyrro 2-ylmethyl ester; d]pyrimidine-6-carboxylic acid benzyl ester; 15 carboxylic acid 2H-thiochromen-2-ylmethyl exter; carboxylic acid [1,3,4]thiadiazol-2-ylmethyl ester; 20 carboxylic acid 1*H*-benzoimidazol-5-ylmethyl ester; 25 30 carboxylic acid 1*H*-benzoimidazol-2-ylmethyl ester; 3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-

carboxylic acid 1*H*-indol-2-ylmethyl ester;

3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6carboxylic-acid-2H-imidazol-2-ylmethyl_ester; 3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine- δ -carboxylic acid 2H-pyrazol-3-ylmethyl ester; 3-Benzyl-\tag{-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 1H-pyrrol-2-ylmethyl ester; 3-Benzyl-2,4-dloxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-3-Benzyl-1-methyl-2,4-diaxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 2H-chromen-2-ylmethyl ester; 3-Benzyl-1-methyl-2,4-dioxo-\2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 2*H*-thioc romen-2-ylmethyl ester; 3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-theno[2,3-d]pyrimidine-6-3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid [1,3,4]thiadiazol-2-ylmathyl ester; 3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-\(\frac{1}{4}\)]pyrimidine-6-3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 1*H*-benzoimidazol-5-ylmethyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3\) d]pyrimidine-6-carboxylic acid 1*H*-benzoimidazol-2-ylmethyl ester; 3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine 6-

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 1*H*-indol-2-ylmethyl ester; 3\Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3dpyrimidine-6-carboxylic acid 1H-indol-5-ylmethyl ester; 3-Benayl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6carboxylic acid \(\frac{1}{4}\)H-indol-5-ylmethyl ester; 3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6carboxylic acid 2,3-dihydro-benzofuran-5-ylmethyl ester; and 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylik acid 2,3-dihydro-benzofuran-5-ylmethyl ester. 10 20. The compound according to Claim 1, selected from: 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid (2-pyridin-4-yl-ethyl)-amide; 3-Benzyl-1-methyl-2,4-diox 0,1,2,3,4-tetrahydro-thieno[2,3-15 d]pyrimidine-6-carboxylic acid (2-morpholin-4-yl-ethyl)-amide; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 4-methyl-benzylamide; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4\tetrahydro-thieno[2,3-20 d]pyrimidine-6-carboxylic acid sec-butylamide 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid cyclopentylamide; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid cyclopropylamide; 25 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro thieno[2,3d]pyrimidine-6-carboxylic acid cyanomethyl-amide; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d|pyrimidine-6-carboxylic acid cyclohexylamide; 3-Benzyl-1-methyl 2,4-dioxo-1,2,3,4-tetrahydro-thieno[2.3-30 d]pyrimidine-6-carboxylic acid 3-methyl-benzylamide; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-

d]pyrimidine-6-carboxylic acid (3-ethoxy-propyl)-amide;

30

-268-3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3dpyrimidine-6-carboxylic acid 2-chloro-benzylamide; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 2-methyl-benzylamide; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-\(\frac{1}{2}\)-carboxylic acid (2,2-diphenyl-ethyl)-amide; 3-Benzy \(\frac{1}{1}\)-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid (pyridin-3-ylmethyl)-amide; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carbox lic acid cyclopropylmethyl-amide; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic açid (1-ethyl-pyrrolidin-2-ylmethyl)-amide; 3-Benzyl-1-methyl-2,4\dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid (pyridin-2-ylmethyl)-amide; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid [2-(3,4-dimethoxy-phenyl)-ethyl]-amide; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid (furan-2-)methyl)-amide; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 2-fluoro-benz lamide; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid (2-bromo-ethyl)-amide; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 4-sulfamoyl-benzylamide; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro thieno[2,3-

d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3dpyrimidine-6-carboxylic acid phenethyl-amide;

 $(S)-2-\{[1-(3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-1,2,3,4-te$ thieno[2,3-d]pyrimidin-6-yl)-methanoyl]-amino}-propionic acid;

Cont 5

10

15

20

25

30

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrinidine-6-carboxylic-acid-(1-phenyl-ethyl)-amide;

3\Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidite-6-carboxylic acid 2-methoxy-benzylamide;

- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-ocarboxylic acid benzylamide;
- 3-Benzyl 1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carooxylic acid 3-bromo-benzylamide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carbox lic acid [2-(4-sulfamoyl-phenyl)-ethyl]-amide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid (3-imidazol-1-yl-propyl)-amide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid{2-(2-methoxy-phenyl)-ethyl]-amide;
- 3-Benzyl-1-methyl-2,4-dixo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-trifluoromethyl-benzylamide;
- 3-Benzyl-1-methyl-2,4-dioxo 1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-amin benzylamide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,23,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid [2-(4-fluoro-phenyl)-ethyl]-amide; and 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4 tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid ((R)-2-hydroxy-1-methyl-ethyl)-amide.
- 21. The compound according to Claim 1, or a pharmaceutically acceptable salt thereof, selected from:
 - 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid methyl ester;
 - 3-(4-Bromo-benzyl)-5-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;
 - 3-(4-Fluoro-benzyl)-5-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;
 - 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid pyridin-4-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrmidine-6-carboxylic acid benzo[b]thiophen-2-ylmethyl ester; \\$-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 1-methyl-1H-indol-5-ylmethyl ester; 3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6carboxylic acid thiophen-3-ylmethyl ester; 3-1,3-Benzodioxol-5-ylmethyl-1-methyl-2,4-dioxo-1,2,3,4tetrahydro-thieno[3,3-d]pyrimidine-6-carboxylic acid benzyl ester; 1-Methyl-2,4dioxo-3-pyridin-4-ylmethyl-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-(4-tert-Butyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-(3,4-Dichloro-benzyl)-5-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 1-Methyl-2,4-dioxo-3-(4-trifluoromethoxy-benzyl)-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidine 6-carboxylic acid benzyl ester; 1-Methyl-3-naphthalen-2-ylmethyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-(4-Cyano-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid benzofuran-5\plantylmethyl ester; 3-(3,5-Dimethoxy-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzy ester; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-

d]pyrimidine-6-carboxylic acid benzyl ester;

3-(3,5-Dinitro-benzyl)-1-methyl-2,4-dioxo-1,2\(\frac{1}{3}\),4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetraliydio-thieno[2,3d]pyrimidine-6-carboxylic acid; and

3-(4-Carboxy-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid 2-ethoxy-benzyl ester.

22.

15 15 20

30

The compound according to Claim 1, or a pharmaceutically acceptable salt thereof, selected from:

3 Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidire-6-carboxylic acid [2-(3,4-dimethoxy-phenyl)-ethyl]-amide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-amino-benzylamide;

3-Benzyl-_methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid [2-(4-chloro-phenyl)-ethyl]-amide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid (biphenyl-2-ylmethyl)-amide;

3-Benzyl-1-methyl 2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic axid 3,4-dimethoxy-benzylamide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid (2-pyridin-4-yl-ethyl)-amide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-diffuoromethoxy-benzylamide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid [2-(3-ethoxy-phenyl)-ethyl]-amide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-chloro-4-fluoro-benzylamide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-terahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2,4-dichloro-benzylamide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrah dro-thieno[2,3-d]pyrimidine-6-carboxylic acid (2-phenyl-propyl)-amide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3,4,5-trimethoxy-benzylamide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-chloro-benzylamide;

3-Benzyl-1-methyl-2,4-dioxe-1,2,3,4 tetrahydre-thiene 2,3-d]pyrimidine-6-carboxylic acid 3,5-dimethoxy-benzylamide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3]d]pyrimidine-6-carboxylic acid 2,3-dimethoxy-benzylamide;

Q 2 cont

10

15

20

25

30

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-trifluoromethyl-benzylamide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-methoxy-benzylamide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-o-carboxylic acid 2-methyl-benzylamide;

3-Benzyl 1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carooxylic acid (4-phenyl-butyl)-amide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid (pyridin-3-ylmethyl)-amide;

3-Benzyl-1-methyl 2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid ((\$)-2,2-dimethyl-4-phenyl-1,3-dioxinan-5-yl)-amide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid [2-(3-methoxy-phenyl)-ethyl]-amide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid (thiophen-2-ylmethyl)-amide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrah dro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-chloro-benzylamide

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro thieno[2,3-d]pyrimidine-6-carboxylic acid (5-methyl-furan-2-ylmethyl)-amide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid (2,2-diphenyl-ethyl)-amide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid [2-(2-methoxy-phenyl)-ethyl] amide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-\d]pyrimidine-6-carboxylic acid [2-(3-trifluoromethyl-phenyl)-ethyl]-amide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d) dyrimidine-6-carbox ylic-acid 4-bromo-benzylamide; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid [2-(1H-indol-3-yl)-ethyl]-amide; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidin 6-carboxylic acid 3,5-dichloro-benzylamide; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid indan-1-ylamide; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid (furan-2-ylmethyl)-amide; 10 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid [2-(4-methoxy-phenyl)-ethyl]-amide; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid\(\frac{1}{2}\),4-dimethoxy-benzylamide; 3-Benzyl-1-methyl-2,4-di\u00e9xo-1,2,3,4-tetrahydro-thieno[2,3-15 d]pyrimidine-6-carboxylic acid 4-chloro-benzylamide; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid (1-phen \(\frac{1}{2}\)-ethyl)-amide; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3/4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 3,4-dichloro benzylamide; 20 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid 4-fluoro-3-trifludromethyl-benzylamide; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid (2-pyridin-2-yl-ethyl)-amide; 25 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3d]pyrimidine-6-carboxylic acid [2-(2,4-dimethyl-phenyl) ethyl]-amide; 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thleno[2,3d]pyrimidine-6-carboxylic acid [2-(2,4-dichloro-phenyl)-ethyl]-amide; 1,3-Dimethyl-2,4-dioxo-1,2,3,4-tetralrydro-thieno[2,3-30 d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide; 3-Cyanomethyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-

d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-thieno]

3-(4-Cyclopropylsulfamoyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-3-(6-nitro-pyridin-3-ylmethyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl 3-(6-nitro-pyridin-3-ylmethyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

1-Methyl-3-(6-nitro-pyridin-3-ylmethyl)-2,4-dioxo-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid (2-methoxy-pyridin-4-ylmethyl)-amide;

3-Cyclohexylmethyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid (2-methoxy-pyridin-4-ylmethyl)-amide;

3-{2-[(1H-Benzimidazole-5-carbonyl)-amino]-ethyl}-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3 d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-[2-(3-piperidin-1-yl-propionylamino)-ethyl]-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-{2-[(6-pyrazol-1-yl-pyridine-3-carbonyl)-amino]-ethyl}-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

3-[2-(4-Diethylamino-benzoylamino)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

3-{2-[(6-Chloro-pyridine-3-carbonyl)-amino]-ethyl}-1\methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

20

25

30

1-Methyl-2,4-dioxo-3-{2-[(1H-pyrrole-2-carbonyl)-amino]-ethyl}-1,2\3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxybenzylamide:

3\[2-(2-Dimethylamino-acetylamino)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxybenzylamide;

1-Methyl-2,4-dioxo-3-{2-[(pyrazine-2-carbonyl)-amino]-ethyl}-1,2,3,4-tetrahydro thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxybenzylamide;

1-Methyl-3-[2-\(\mathbb{Q}\)-methyl-2-methylamino-propionylamino)-ethyl]-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-\\2-[(pyrrolidine-2-carbonyl)-amino]-ethyl}-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxybenzylamide;

1-Methyl-2,4-dioxo-3-{2-[3-(5-phenyl-1H-pyrrol-2-yl)propionylamino]-ethyl}-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6carboxylic acid 3-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-{2-[2-(pyridin-4-ylsulfanyl)-acetylamino]ethyl \}-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

3-(6-Amino-pyridin-3-ylmethyl)-1-methyl2,4-dioxo-1,2,3,4tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxybenzylamide;

1-Methyl-2,4-dioxo-3-(3-phenyl-prop-2-ynyl)-1,\(\frac{1}{2}\)3,4-tetrahydrothieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-(6-Amino-pyridin-3-ylmethyl)-1-methyl-2,4-dioxo-\,2,3,4tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxybenzyiamide;

3-(6-Amino-pyridin-3-ylmethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid (pyridin 4-ylmethyl)-amide;

H

1-Methyl-2,4-dioxo-3-[2-(pyridin-2-ylamino)-ethyl]-

1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic_acid 4-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-[2-(pyrimidin-2-ylamino)-ethyl]-

1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide; and

1\Methyl-2,4-dioxo-3-[2-(pyrimidin-2-ylamino)-ethyl]-

1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide.

23. A pharmaceutical composition, comprising a compound of Claim 1, or a pharmaceutically acceptable salt thereof, together with a pharmaceutically acceptable carrier, diluent, or excipient.

24. A pharmaceutical composition, comprising a compound of Claim 2, or a pharmaceutically acceptable salt thereof, together with a pharmaceutically acceptable carrier, diluent, or excipient.

25. A method for inhibiting MMP-13 in an animal, comprising administering to the animal an MMP-13 inhibiting amount of a compound of Claim 1, or a pharmaceutically acceptable salt thereof.

26. A method for inhibiting MMP-13 in an animal, comprising administering to the animal an MMP-13 inhibiting amount of a compound of Claim 2, or a pharmaceutically acceptable salt thereof.

27. A method for treating a disease mediated by an MMP-13 enzyme, comprising administering to a patient suffering from such a disease an effective amount of a compound of Claim 1, or a pharmaceutically acceptable salt thereof.

28. A method for treating a disease mediated by an MMP-13 enzyme, comprising administering to a patient suffering from such a disease an

15

10

20

25

30

N

effective amount of a compound of Claim 2, or a pharmaceutically acceptable salt thereof.

Cont

10

15

20

25

- 29. A method for treating a cancer, comprising administering to a patient suffering from such a disease an anticancer effective amount of a compound of Claim 1, or a pharmaceutically acceptable salt thereof.
- 30. A method for treating breast carcinoma, comprising administering to a patient suffering from such a disease an anticancer effective amount of a compound of Claim 1, or a pharmaceutically acceptable salt thereof.
- 31. A method for treating a rheumatoid arthritis, comprising administering to a patient suffering from such a disease an effective amount of a compound of Claim 1, or a pharmaceutically acceptable salt thereof.
- 32. A method for treating a osteoarthritis, comprising administering to a patient suffering from such a dreease an effective amount of a compound of Claim 1, or a pharmaceutically acceptable salt thereof.
- 33. A method for treating a heart failure, comprising administering to a patient suffering from such a disease an effective amount of a compound of Claim 1, or a pharmaceutically acceptable salt thereof.
- 34. A method for treating a inflammation, comprising administering to a patient suffering from such a disease an effective amount of a compound of Claim 1, or a pharmaceutically acceptable salt thereof.
- 35. A method for treating a cancer, comprising administering to a patient suffering from such a disease an anticancer effective amount of a compound of Claim 2, or a pharmaceutically acceptable salt thereof.



- A method for treating breast carcinoma, comprising administering to a patient suffering from such a disease an anticancer effective amount of a compound of Claim 2, or a pharmaceutically acceptable salt thereof.
- 37. A method for treating a rheumatoid arthritis, comprising administering to a patient suffering from such a disease an effective amount of a compound of Claim 2, or a pharmaceutically acceptable salt thereof.
- 38. A method for treating a osteoarthritis, comprising administering to a patient suffering from such a disease an effective amount of a compound of Claim 2, or a pharmaceutically acceptable salt thereof.
- 39. A method for treating a heart failure, comprising administering to a patient suffering from such a disease an effective amount of a compound of Claim 2, or a pharmaceutically acceptable salt thereof.
- 40. A method for treating a inflammation, comprising administering to a patient suffering from such a disease an effective amount of a compound of Claim 2, or a pharmaceutically acceptable salt thereof.
- 41. A compound of Formula I

$$R^{1}$$
 N
 N
 R^{4}
 W

and the pharmaceutically acceptable salts thereof; wherein:

W is

15

20

10

Ι

15

5

 \mathbb{R}^2

 $(O)_n$

or

B is O or NR⁵;

A is -C- or -S-;

X is O, S, SO, SO₂, NR^5 , or CH_2 ;

each Y independently is O or S;

R¹, R⁴, and R⁵ independently are hydrogen, C₁-C₆ alkyl, C₂-C₆ alkenyl, C_2 - C_6 alkynyl, $(CH_2)_n$ cycloalkyl, $(CH_2)_n$ heterocyclic, C_1 - C_6 alkanoyl, $(CH_2)_n$ aryl, or $(CH_2)_n$ heteroaryl;

R² and R³ independently are hydrogen, halo, C₁-\dot{6} alkyl, C₂-C₆ alkenyl, C_2 - C_6 alkynyl, CN, NO₂, NR⁴R⁵, (CH₂)_n cycloalkyl, (CH₂)_n aryl, or $(CH_2)_n$ heteroaryl;

n is 0, 1, or 2;

R4 and R5 when taken together with the nitrogen to which they are attached complete a 3- to 8-membered ring optionally containing O, S, or N, and substituted or unsubstituted.

compound of Formula II

10

wherein:

each Y independently is O or S;

R¹, R⁴, and R⁵ independently are hydrogen, C₁-C₆ alkyl, C₂-C₆ alkenyl, C2-C6 alkynyl, (CH2)_n cycloalkyl, (CH2)_n heterocyclic, C_1 - C_6 alkanovl, $(CH_2)_n$ aryl, or $(CH_2)_n$ heteroaryl;

 R^2 and R^3 independently are hydrogen, halo, $C_1\text{-}C_6$ alkyl, $C_2\text{-}C_6$ alkenyl, $\text{C}_2\text{-C}_6 \text{ alkynyl, CN} \text{NO}_2, \text{NR}^4\text{R}^5, (\text{CH}_2)_n \text{ cycloalkyl, } (\text{CH}_2)_n$ aryl, or (CH₂)_n heteroaryl;

n is 0, 1, or 2;

R⁴ and R⁵ when taken together with the nitrogen to which they are attached complete a 3- to 8\membered ring optionally containing O, S, or N, and substituted of unsubstituted.

A compound of Formula III 15 43.

$$R^{1}$$
 R^{1}
 R^{1}
 R^{2}
 R^{3}

Ш

 \mathbf{II}

wherein:

each Y independently is O or S;

10075073 DE130E

 R^1 , R^4 , and R^5 independently are hydrogen, C_1 - C_6 alkyl, C_2 - C_6 alkenyl, C_2 - C_6 -alkynyl, $(CH_2)_n$ -cycloalkyl, $(CH_2)_n$ -heterocyclic, C_1 - C_6 alkanoyl, $(CH_2)_n$ aryl, or $(CH_2)_n$ heteroaryl;

 R^2 and R^3 independently are hydrogen, halo, C_1 - C_6 alkyl, C_2 - C_6 alkenyl, C_6 alkynyl, CN, NO₂, NR⁴R⁵, (CH₂)_n cycloalkyl, (CH₂)_n aryl, ox (CH₂)_n heteroaryl;

n is 0, 1, or 2;

R⁴ and R⁵ when taken together with the nitrogen to which they are attached complete a 3- to 8-membered ring optionally containing O, S, or N, and substituted or unsubstituted.

44. A compound of Formula I

$$R^1$$
 R^4 R^2 R^3

IV

wherein:

each Y independently is O or S;

R¹, R⁴, and R⁵ independently are hydrogen, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, (CH₂)_n cycloalkyl, (CH₂)_n heterocyclic, C₁-C₆ alkanoyl, (CH₂)_n aryl, or (CH₂)_n heteroaryl;

 R^2 and R^3 independently are hydrogen, halo, C_1 - C_6 alkyl, C_2 - C_6 alkenyl, C_2 - C_6 alkynyl, CN, NO₂, NR⁴R⁵, (CH₂)_n cycloalkyl, (CH₂)_n aryl, or (CH₂)_n heteroaryl;

n is 0, 1, or 2;

R⁴ and R⁵ when taken together with the nitrogen to which they are attached complete a 3- to 8-membered ring optionally containing O, S, or N, and substituted or unsubstituted.

15

20

$$R^{1}$$
 N
 R^{4}
 N
 R^{5}

V

5

10

wherein \mathbb{R}^{1} \mathbb{R}^{2} , \mathbb{R}^{3} , \mathbb{R}^{4} , and \mathbb{R}^{5} ;

each Y independently is O or S;

R¹, R⁴, and R⁵\independently are hydrogen, C₁-C₆ alkyl, C₂-C₆ alkenyl,

C2-C6 alkynyl, (CH2)_n cycloalkyl, (CH2)_n heterocyclic,

 C_1 - C_6 alkanoyl, $(CH_2)_n$ aryl, or $(CH_2)_n$ heteroaryl;

R² and R³ independently are hydrogen, halo, C₁-C₆ alkyl, C₂-C₆ alkenyl,

 C_2 - C_6 alkynyl, O_1 , O_2 , O_3 , O_4 , O_2 , O_4 , O_5 , O_7 , O_8 , aryl, or (CH₂)_n heteroaryl;

n is 0, 1, or 2;

 R^4 and R^5 when taken together with the nitrogen to which they are attached complete a 3- to 8-membered ring optionally containing O, S, or N, and substituted or unsubstituted.

A pharmaceutical composition comprising a compound of Claim 41 15 46. together with a pharmaceutically acceptable carrier, diluent, or excipient.

> 47. A pharmaceutical composition comprising a compound of Claim 42 together with a pharmaceutically acceptable carrier, diluent, or excipient.

48. A method for inhibiting MMP-13 enzymes in animals comprising administering to the animal an MMP-13 inhibiting amount of a compound of Claim 41.

20

- 49. A method for treating cancer comprising administering to a patient having cancer and in need of treatment an anticancer effective amount of a compound of Claim 41.
- 50. A method for treating arthritis comprising administering to a patient in need of treatment an anti-arthritic amount of a compound of Claim 41.
- 51. The method of Claim 50 wherein the arthritis is osteoarthritis.
- 52. The method of Claim 50 wherein the arthritis is rheumatoid arthritis.